Remote Location VOIP Roaming Behind Firewalls

Abstract

A connection between an external host and a host internal to a network (e.g., VPN or LAN) and located behind a firewall and/or NAT-enabled device is established and maintained. A dynamic DNS server is updated with the remote location (RL) information associated with the internal host. This information includes the dialed number (i.e. the number assigned to the internal host), the physical address of the internal host, the private IP address corresponding to the internal host, the public IP address corresponding to the firewall, and the port on which voice data is to be communicated. Each time the internal host's location changes, a new and updated record is sent to the dynamic DNS server. The call placed by an external host reaches its final destination based on the record information in the DNS server table. Once the connection between the external host and the internal host is established, voice traffic is "cut-through" the firewall on this channel associate with the port designated by the RL record.